

REMARKS

Reconsideration of this Application is respectfully requested. Claims 1 through 20 remain pending. Applicant asserts that the claims of the present application are patentable over the cited art.

35 USC Section 103 rejections

Paragraphs 1-2 reject independent Claims 1, 9, and 14 as being obvious in view of Schmidt (U.S. Patent No. 6,842,803) in further view of Chisholm (U.S. Patent No. 5,968,143). Applicant respectfully traverses.

Embodiments of the claimed invention implement a bypass method for disk I/O (input output) in a computer system. The method includes transferring a command to a disk controller, wherein the command causes a start up of a disk drive coupled to the disk controller. Subsequent to this command transfer, disk transaction information is then prepared by packaging a plurality of data structures comprising the disk transaction. The disk controller processes the disk transaction information to control the disk drive and implement a disk I/O, thereby enabling the disk controller to hide the start up latency of the disk drive. While the disk drive executes its start up routine (e.g., which can take 4 to 6 microseconds), the disk controller packages this transaction.

Applicant points out that Schmidt is directed towards a general computer system that executes a privileged mode driver. Schmidt does not appear to be directed in any particular fashion to the transfer of data through hard drive protocols, disk controller communications procedures, or the like. Applicant points out that the cited section of Schmidt (e.g., figure 1 reference numbers 70 and 80) relied upon to show preparing disk transaction information appears to be directed towards a software object model of a user station communicating with a base station (e.g., protocol layer 80 and physical layer 70 of the software modem 50 shown in figure 1). This apparently has nothing to do with disk transactions or the preparation of disk transaction information.

Chisholm is relied upon to show the transferring of a command to a disk controller, wherein the command causes a start up of a disk drive coupled to the disk controller, as recited in Claim 1. Specifically, Chisholm figure 3 reference number 304 is cited as showing the transferring of the command causing start up of the disk drive. Chisholm appears to be directed towards the transfer of command blocks between a host processor and a local processor. Chisholm describes a system whereby a transfer signal is given to a command block transfer controller to start a command block transfer without a local processor unit intervention.

There is no description within Chisholm of the transfer of a command to cause the startup of a disk drive coupled to the disk controller, and the subsequent implementation of a disk I/O from the disk controller. There is no description within Chisholm of the start up latency of the disk drive. There is no description or disclosure within Chisholm of the benefits of issuing a command to start up a disk drive and subsequently packaging the data comprising the command for implementation of the disk drive I/O. There is no description within Chisholm of the need to hide disc start up latency. Thus, the issuance of a command to initiate a disk drive start up followed by the actual packaging and implementation of the disk drive I/O is in no way obvious and is not shown or suggested by Chisholm.

Accordingly, Applicant points out that Schmidt in combination with Chisholm does not show or suggest the claimed invention. Applicant further points out that there is no motivation to combine a host processor-local processor transfer scheme of Chisholm with a software controlled modem of Schmidt to obtain the functionality of the claimed invention. Thus, independent Claims 1, 9, and 14 are not obvious in view of the Chisholm-Schmidt combination within the meaning of 35 USC Section 103.

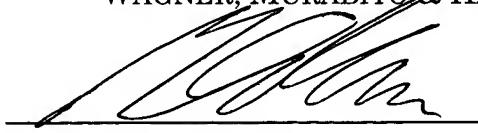
CONCLUSION

Applicant respectfully asserts that all claims (Claims 1-20) are in condition for allowance and Applicant earnestly solicits such action from the Examiner. The Examiner is urged to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Please charge any additional fees or apply any credits to our PTO deposit account number: 23-0085.

Respectfully submitted,
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